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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/475,614

12/30/1999

Gilbert Wolrich

P7876

6580

76973

7590

04/06/2012

The Law Offices of Christopher K. Gagne
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EXAMINER

ENG, DAVID Y

ART UNIT

PAPER NUMBER

2455

MAIL DATE

DELIVERY MODE

04/06/2012

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/475,614	WOLRICH ET AL.	
	Examiner	Art Unit	
	DAVID ENG	2455	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2012.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 61-76 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 61-76 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claims 1-60 have been cancelled. Claims 61-76 are pending with 61 and 69 being independent claims.

In view of the amendment, the Section 101 Rejection of claims 61-67 is withdrawn.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 61-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belkin (USP 6,604,125) in view of Bush (USP 6,308,319).

See at least the abstract, columns 1-3, Figure 1, the description of web server 106 and the components thereof, including items 110, 114 and 112, in the specification of Belkin. Belkin teaches:

Claims 61, 69

Machine-readable memory storing instructions that when executed result in a processor performing operations comprising:

assigning received packets (packets from network 104) to threads (see the description of thread pool information 114 in Figure 1 and thread pool configuration table in Figure 2) for processing (see the description of interactions between item 110, 114 and 112 in Figure 1), the threads to be executed by microengines (engines 122, 124 ... 126 in Figure 1) in the processor, the assigning being in accordance with thread

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scheduling information that includes thread capabilities information, port-to-thread assignments listing, and thread busy tracking information, the thread capabilities information indicating receive processing threads capabilities and appropriate port protocol servicing capabilities, the port- to-thread assignments listing maintaining a current list of active receive processing thread- to-port assignments, the thread busy tracking information being maintained by a thread busy mask register that indicates any threads that are actively servicing ports and

in event that a processing exception occurs for a particular thread that is processing concerning a particular received packet, sending the particular received packet to a processor core for further processing by the processor core.

Obviousness

Belkin did not teach whether branch or exception is required during thread execution. Programming technique, such as interrupt, exception or branching is well known in computer art. See at least the title and the abstract in Bush. Bush teaches branching or exception in thread execution. It would have been obvious to a person of ordinary skill in the art to incorporate the well-known programming technique as taught by Bush in Belkin for processing branching or exception.

Newly Inserted Limitations

The amendment further limit that the assigning being in accordance with thread scheduling information that includes certain conditions such as thread capabilities, port-to-thread assignments listings, etc. The claims recite a single assigning step for assigning threads to microengines according to a list of conditions. The single assigning

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step can be interpreted as that the assigning of threads to the microengines is based on which one of the microengines matches the needs of the threads. See Figure 1 in Belkin. Each one of the engines in Belkin has specific function or service. The assignment of threads to engines in Belkin is based on what kind of services the threads need.

Claims 62, 70

The reason for branching is based on the function of the thread and is not patentably distinct over the applied art.

Claims 63-68 and 71-76

See 112 and 114 in Figure 1 of Belkin. Belkin also teaches various types of threads and engines for providing different services.

Response

Applicants rely on the newly inserted limitation for patentability which as been addressed in the rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID Y. ENG whose telephone number is 571-272-3984. The examiner can normally be reached on M-F from 8AM to 3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise, can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/DAVID Y. ENG/

Primary Examiner, Art Unit 2455